Aktachment: No

Case/Application number: 10596036 PAIM http://expowebl:89017cgi pin/expo/Geninfo/snquery.pl?APPL_ID=10596086> Priority App. Filing Date: Format for Search Results: SCORE

Meaning of unusual acronyms or initialisms:

Identify the novelty:

Additional Comments:

Search compounds of claim 31 where benzene ring substituent may be in any position, any lower alkyl may also be hydrogen and any hydrogen may also be lower alkyl.

=> fil hcaplus

FILE 'HCAPLUS' ENTERED AT 12:17:25 ON 11 JAN 2010
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FILE COVERS 1907 - 11 Jan 2010 VOL 152 ISS 3
FILE LAST UPDATED: 10 Jan 2010 (20100110/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2009

 ${\tt HCAplus}$ now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

CAS Information Use Policies apply and are available at:

http://www.cas.org/legal/infopolicy.html

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d stat que 113 L1 STR

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DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 22

STEREO ATTRIBUTES: NONE

L3 5172 SEA FILE=REGISTRY SSS FUL L1 L5 STR

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L13 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2005:567163 HCAPLUS Full-text DOCUMENT NUMBER: 143:78213

TITLE: Preparation of cyclohexylalkyl quinolinone and quinoxalinone derivatives as poly(ADP-ribose)

polymerase (PARP) inhibitors

INVENTOR(S): Mabire, Dominique Jean-Pierre; Van Dun, Jacobus

Alphonsus Josephus; Somers, Maria Victorina Francisca;

Wouters, Walter Boudewijn Leopold PATENT ASSIGNEE(S): Janssen Pharmaceutica N. V., Belg.

SOURCE: PCT Int. Appl., 59 pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): CASREACT 143:78213; MARPAT 143:78213 GT

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- AB Title compds. I [n = 0-1; M = 0-1; X = N, CR4; Y = N, CH; Q = NH, O, CO, etc.; RI = alkyl, thienyl, R2 = H or together with R3 may form O; R3 = H, alkyl, OH, etc. or R3 = (CH2)pZ; R4 = H or together with R1 may form (CH-CR1)2; p = 0-2; Z = (un)substituted heterocycle] and their pharmaceutically acceptable salts, are prepared and disclosed as inhibitors of poly(ADP-ribose) polymerase (PARP). Thus, e.g., II was prepared by reaction of 3-ethyl-2(1H)-quinolinone with chloroacetyl chloride followed by coupling with piperidine and subsequent reduction The inhibitory activity of I towards PARP-1 was evaluated in scintillation proximity assays and in filtration assays and it was revealed that compds. of the invention displayed inhibitory activity at initial test concns. of 10-6 and 10-5 M, resp. I as inhibitors of poly(ADP-ribose) polymerase should prove useful in the treatment of PARP-1 mediated disorders. Pharmaceutical compns. comprising I are disclosed.
- IT 855444-20-1P 855444-33-6P 855444-40-5P
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)
 - (preparation of cyclohexylalkyl quinolinone and quinoxalinone derivs. as poly(ADP-ribose) polymerase (PARP) inhibitors)
- RN 855444-20-1 HCAPLUS
- CN 2(1H)-Quinolinone, 6-[cyclohexyl[(2-methoxyethyl)amino]methyl]-3-ethyl-(CA INDEX NAME)

- RN 855444-33-6 HCAPLUS
- CN 2(1H)-Quinolinone, 6-[cyclohexyl[[2-(dimethylamino)ethyl]amino]methyl]-3-ethyl- (CA INDEX NAME)

RN 855444-40-5 HCAPLUS

CN 2(1H)-Quinolinone, 6-[(S)-cyclohexyl[[2-(dimethylamino)ethyl]amino]methyl]3-ethyl- (CA INDEX NAME)

Absolute stereochemistry.

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD

(3 CITINGS)

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2005:523430 HCAPLUS Full-text
DOCUMENT NUMBER: 143:60003

TITLE: Preparation of 6-substituted 2-quinolinones and

2-quinoxalinones as poly(ADP-ribose) polymerase
inhibitors

INVENTOR(S): Mabire, Dominique Jean-Pierre; Guillemont, Jerome Emile Georges; Van Dun, Jacobus Alphonsus Josephus;

Somers, Maria Victorina Francisca; Wouters, Walter

Boudewijn Leopold
PATENT ASSIGNEE(S): Janssen Pharmaceu

PATENT ASSIGNEE(S): Janssen Pharmaceutica N. V., Belg. SOURCE: PCT Int. Appl., 48 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

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PRIORITY APPLN. INFO.:
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): CASREACT 143:60003; MARPAT 143:60003

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$$\mathbb{R}^{4}$$

$$\mathbb{R}^{3}$$

$$\mathbb{R}^{1}$$

AB The title compds. I [n = 0-2; X = N, CRS; R5 = H or taken together with R1 may form CH:CHCH:CH; R1 = alky1, thieny1; R2 = H, OH, or taken together with R3 or R4 may form O; R3 = OH, OR8, SR9, etc.; R8 = alky1, alky1carbony1, dialky1aminoalky1; R9 = dialky1aminoalky1; R4 = H, alky1, furany1, etc.; with the provision], useful for the treatment of a PARP mediated disorder, were prepared E.g., a multi-step synthesis of II, starting from 1-(4-amino-3-nitropheny1)-2-methy1-1-propanone, was given. The exemplified compds. I were tested in an in vitro assay based on SPA technol. and in an in vitro filtration assay assessing PARP-1 activity (data given). The pharmaceutical composition comprising the compound I is disclosed.

T 854523-79-8P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of 6-substituted 2-quinolinones and 2-quinoxalinones as poly(ADP-ribose) polymerase inhibitors)

RN 854523-79-8 HCAPLUS

CN 2(1H)-Quinolinone, 6-[2-(dimethylamino)acetyl]-3-ethyl- (CA INDEX NAME)

854523-80-1P

RN 854523-77-6 HCAPLUS

854523-77-6P

IT

CN Formamide, N-[1-(3-ethyl-1,2-dihydro-2-oxo-6-quinoxalinyl)-2-methylpropyl]-(CA INDEX NAME)

854523-82-3P

RN 854523-80-1 HCAPLUS

CN 2(1H)-Quinolinone, 6-[3-(dimethylamino)-1-(2-furanyl)propyl]-3-methyl-(CA INDEX NAME)

RN 854523-82-3 HCAPLUS

CN Formamide, N-[1-(1,2-dihydro-3-methyl-2-oxo-6-quinolinyl)-3-phenylpropyl]- (CA INDEX NAME)

RN 854523-83-4 HCAPLUS

CN 2(1H)-Quinolinone, 6-[2-(dimethylamino)-1-hydroxyethyl]-3-ethyl- (CA

INDEX NAME)

- RN 854523-86-7 HCAPLUS
- CN 2(1H)-Quinoxalinone, 3-ethyl-6-[1-[[2-[4-(4-fluorobenzoy1)-1-piperidinyl]ethyl]amino]-2-methylpropyl]- (CA INDEX NAME)

- RN 854523-87-8 HCAPLUS
- CN 2(1H)-Quinolinone, 3-ethyl-6-[2-[[3-(1-piperidinyl)propyl]amino]ethyl]-(CA INDEX NAME)

- RN 854523-88-9 HCAPLUS
- CN 2(1H)-Quinolinone, 3-ethyl-6-[2-[[3-[methyl(phenylmethyl)amino]propyl]amino]ethyl]- (CA INDEX NAME)

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RN 854523-90-3 HCAPLUS

RN 854523-91-4 HCAPLUS

CN 2(1H)-Quinolinone, 3-methyl-6-[2-methyl-1-[[3-(1-piperidinyl)propyl]amino]propyl]- (CA INDEX NAME)

- RN 854523-92-5 HCAPLUS
- CN 2(1H)-Quinolinone, 6-[3-(dimethylamino)-1-hydroxy-1-(2-pyridinyl)propyl]-3methyl- (CA INDEX NAME)

- RN 854523-94-7 HCAPLUS

IT 130347-78-3

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(preparation of 6-substituted 2-quinolinones and 2-quinoxalinones as poly(ADP-ribose) polymerase inhibitors)

RN 130347-78-3 HCAPLUS

CN 2(1H)-Quinoxalinone, 3-ethyl-6-[2-methyl-1-(1H-1,2,4-triazol-1-yl)propyl](CA INDEX NAME)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD

(2 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2005:523424 HCAPLUS Full-text

DOCUMENT NUMBER: 143:60001

TITLE: Preparation of 6-alkenyl and 6-phenylalkyl substituted

2-quinolinones and 2-quinoxalinones as

poly(ADP-ribose) polymerase inhibitors
INVENTOR(S): Mabire, Dominique Jean-pierre; Guillemont, Jerome

Emile Georges; Van Dun, Jacobus Alphonsus Josephus;

Somers, Maria Victorina Francisca; Wouters, Walter

Boudewijn Leopold

PATENT ASSIGNEE(S): Janssen Pharmaceutica N. V., Belg.

SOURCE: PCT Int. Appl., 102 pp.

CODEN: PIXXD2 Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): CASREACT 143:60001; MARPAT 143:60001 GI

TT 854532-61-9P 854533-95-2P RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of 6-alkenyl and 6-phenylalkyl substituted 2-quinolinones and 2-quinoxalinones as poly(ADP-ribose) polymerase inhibitors)

- RN 854532-61-9 HCAPLUS
- CN 6-Quinolineacetonitrile, 1,2-dihydro-3-methyl-2-oxo- α -phenyl- (CA INDEX NAME)

- RN 854533-95-2 HCAPLUS
- CN Formamide, N-[(1,2-dihydro-3-methyl-2-oxo-6-quinolinyl)phenylmethyl]- (CA INDEX NAME)

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of 6-alkenyl and 6-phenylalkyl substituted 2-quinolinones and 2-quinoxalinones as poly(ADP-ribose) polymerase inhibitors)

- RN 854532-58-4 HCAPLUS
- CN 2(1H)-Quinolinone, 3-methyl-6-[(methylamino)phenylmethyl]- (CA INDEX NAME)

- RN 854532-62-0 HCAPLUS
- CN 2(1H)-Quinolinone, 3-methyl-6-(phenyl-1H-1,2,4-triazol-1-ylmethyl)- (CA INDEX NAME)

- RN 854532-63-1 HCAPLUS
- CN 2(1H)-Quinolinone, 6-[(dimethylamino)phenylmethyl]-3-methyl- (CA INDEX NAME)

- RN 854532-64-2 HCAPLUS
- CN Urea, N-[(1,2-dihydro-3-methyl-2-oxo-6-quinolinyl)phenylmethyl]-N'-[3-(1-piperidinyl)propyl]- (CA INDEX NAME)

- RN 854532-65-3 HCAPLUS
- CN Acetamide, N-[2-(1,2-dihydro-3-methyl-2-oxo-6-quinolinyl)-2-phenylethyl]- (CA INDEX NAME)

- RN 854532-75-5 HCAPLUS
- CN Formamide, N-[(2,3-dihydro-1,4-benzodioxin-6-yl)(3-ethyl-1,2-dihydro-2-oxo-6-quinolinyl)methyl]- (CA INDEX NAME)

- RN 854532-79-9 HCAPLUS
- CN 2(1H)-Quinoxalinone, 6-[(4-chlorophenyl)-1H-1,2,4-triazol-1-ylmethyl]-3-ethyl- (CA INDEX NAME)

- RN 854532-80-2 HCAPLUS
- CN 2(1H)-Quinolinone, 3-methyl-6-[phenyl[[3-(2-thienyl)propyl]amino]methyl]-(CA INDEX NAME)

- RN 854532-81-3 HCAPLUS
- CN 2(1H)-Quinolinone, 3-methyl-6-[phenyl[[3-(1H-pyrrol-1yl)propyl]amino]methyl]- (CA INDEX NAME)

- RN 854532-82-4 HCAPLUS
- CN Acetamide, N-[2-[[(1,2-dihydro-3-methyl-2-oxo-6-quinolinyl)phenylmethyl]amino]ethyl]- (CA INDEX NAME)

RN 854532-83-5 HCAPLUS

N 2(1H)-Quinolinone, 3-ethyl-6-[phenyl[[3-(1piperidinyl)propyl]amino]methyl]- (CA INDEX NAME)

RN 854532-84-6 HCAPLUS

RN 854532-86-8 HCAPLUS

CN 2(1H)-Quinolinone, 6-[[(2-hydroxyethyl)amino]phenylmethyl]-3-methyl- (CA INDEX NAME)

RN 854532-87-9 HCAPLUS

CN 2(1H)-Quinoxalinone, 3-ethyl-6-(phenyl-1H-1,2,4-triazol-1-ylmethyl)- (CA INDEX NAME)

- RN 854533-07-6 HCAPLUS
- CN 2(1H)-Quinolinone, 6-[(2,3-dihydro-1,4-benzodioxin-6-y1)[[2-[4-(4-fluorobenzoy1)-1-piperidiny1]ethy1]amino]methy1]-3-ethy1- (CA INDEX NAME)

- RN 854533-14-5 HCAPLUS
- CN 2(1H)-Quinoxalinone, 3-ethyl-6-[[[2-[4-(4-fluorobenzoyl)-1piperidinyl]ethyl]amino]phenylmethyl]-, ethanedioate (2:5) (CA INDEX NAME)
 - CM 1
 - CRN 854533-13-4
 - CMF C31 H33 F N4 O2

- CM 2
- CRN 144-62-7
- CMF C2 H2 O4

- RN 854533-16-7 HCAPLUS
- CN 2(1H)-Quinoxalinone, 3-ethy1-6-[pheny1[[3-(1-

piperidinyl)propyl]amino]methyl]-, ethanedioate (2:5) (CA INDEX NAME)

CM 1

CRN 854533-15-6 CMF C25 H32 N4 O

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 854533-18-9 HCAPLUS

CN 2(1H)-Quinolinone, 6-[(2,3-dihydro-1,4-benzodioxin-6-y1)[[3-(1-piperidinyl)propyl]amino]methyl]-3-ethyl-, ethanedioate (1:2) (CA INDEX NAME)

CM 1

CRN 854533-17-8 CMF C28 H35 N3 O3

CM 2

CRN 144-62-7 CMF C2 H2 O4

RN 854533-20-3 HCAPLUS CN 2(1H)-Ouinolinone, 6-

CN 2(1H)-Quinolinone, 6-[(2,3-dihydro-1,4-benzodioxin-6-yl)[[1-(phenylmethyl)-3-piperidinyl]amino]methyl]-3-ethyl-, ethanedioate (2:5) (CA INDEX NAME)

CM 1

CRN 854533-19-0 CMF C32 H35 N3 O3

_CH2—Ph

CM 2

CRN 144-62-7

CMF C2 H2 O4

RN 854533-25-8 HCAPLUS

CN 2(1H)-Quinoxalinone, 3-ethyl-6-[[[3-

[methyl(phenylmethyl)amino]propyl]amino]phenylmethyl]-, ethanedioate (1:2)
 (CA INDEX NAME)

CM 1

CRN 854533-24-7

CMF C28 H32 N4 O

$$Ph-CH_2-\stackrel{Me}{N}-(CH_2)\stackrel{Ph}{3-NH}-\stackrel{Ph}{CH} \stackrel{N}{\longrightarrow} \stackrel{Et}{\longrightarrow} 0$$

CM 2

```
CRN 144-62-7
    CMF C2 H2 O4
   _й_й_...
   854533-27-0 HCAPLUS
RN
CN
   2(1H)-Quinolinone, 6-[(2,3-dihydro-1,4-benzodioxin-6-yl)[[3-
    [methyl(phenylmethyl)amino]propyl]amino]methyl]-3-ethyl-, ethanedioate
     (1:2) (CA INDEX NAME)
    CM
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            NH- (CH2)3
    CM
         2
    CRN 144-62-7
    CMF C2 H2 O4
RN
   854533-29-2 HCAPLUS
CN
    2(1H)-Quinolinone, 3-ethyl-6-[[(2-methoxyethyl)amino]phenylmethyl]-,
    ethanedioate (1:2) (CA INDEX NAME)
    CM 1
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CRN 854533-28-1 CMF C21 H24 N2 O2

CM

CRN 144-62-7 CMF C2 H2 O4

RN 854533-43-0 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[4H-1,2,4-triazol-4-yl[3-(trifluoromethyl)phenyl]methyl]- (CA INDEX NAME)

- RN 854533-56-5 HCAPLUS
- CN 6-Quinolineacetonitrile, 1,2-dihydro-α,3-dimethyl-2-oxo-α-phenyl- (CA INDEX NAME)

- RN 854533-62-3 HCAPLUS
- CN 2(1H)-Quinolinone, 6-[1-(2,3-dihydro-1,4-benzodioxin-6-yl)-3-(dimethylamino)propyl]-3-ethyl- (CA INDEX NAME)

$$\begin{array}{c|c} \text{CH}_2-\text{CH}_2-\text{NMe}_2 \\ \\ \text{CH} \end{array}$$

RN 854533-65-6 HCAPLUS

CN 2(1H)-Quinolinone, 6-[3-(dimethylamino)-1-[3-(trifluoromethyl)phenyl]propyl]-3-ethyl-, ethanedioate (1:1) (CA INDEX NAME)

CM 1

CRN 854533-64-5

CMF C23 H25 F3 N2 O

2 CM

CRN 144-62-7 CMF C2 H2 O4

RN 854533-67-8 HCAPLUS

CN 2(1H)-Quinolinone, 6-[3-(dimethylamino)-1-phenylpropyl]-3-ethyl- (CA INDEX NAME)

RN 854533-75-8 HCAPLUS

CN Formamide, N-[(3-ethyl-1,2-dihydro-2-oxo-6-quinolinyl)phenylmethyl]- (CA INDEX NAME)

RN 854533-79-2 HCAPLUS

CN Formamide, N-[(1,2-dihydro-3-methyl-2-oxo-6-quinolinyl)(3-methylphenyl)methyl]- (CA INDEX NAME)

RN 854533-81-6 HCAPLUS

CN Formamide, N-[1,3-benzodioxol-5-yl(1,2-dihydro-3-methyl-2-oxo-6-quinolinyl)methyl]- (CA INDEX NAME)

RN 854533-83-8 HCAPLUS

CN Benzoic acid, 4-[(1,2-dihydro-3-methyl-2-oxo-6quinolinyl)(formylamino)methyl]-, ethyl ester (CA INDEX NAME)

RN 854533-85-0 HCAPLUS

CN Formamide, N-[(1,2-dihydro-3-methyl-2-oxo-6-quinolinyl)(3methoxyphenyl)methyl]- (CA INDEX NAME)

- RN 854533-87-2 HCAPLUS
- CN Formamide, N-[(1,2-dihydro-3-methyl-2-oxo-6-quinolinyl)(4-fluorophenyl)methyl]- (CA INDEX NAME)

- RN 854533-91-8 HCAPLUS
- CN Formamide, N-[(3-chlorophenyl)(1,2-dihydro-3-methyl-2-oxo-6-quinolinyl)methyl]- (CA INDEX NAME)

- RN 854533-93-0 HCAPLUS
- CN Formamide, N-[(4-chlorophenyl)(1,2-dihydro-3-methyl-2-oxo-6-quinolinyl)methyl]- (CA INDEX NAME)

- RN 854534-23-9 HCAPLUS
- CN 2(1H)-Quinolinone, 5-[1-(1,2-dihydro-3-methyl-2-oxo-6-quinolinyl)-3-(dimethylamino)-1-propen-1-yl]-3-methyl- (CA INDEX NAME)

- RN 854534-24-0 HCAPLUS
- CN 2(1H)-Quinolinone, 6-[(1E)-1-(2,3-dihydro-1,4-benzodioxin-6-yl)-3-(dimethylamino)-1-propen-1-yl]-3-ethyl- (CA INDEX NAME)

Double bond geometry as shown.

RN 854534-25-1 HCAPLUS

CN 2(1H)-Quinolinone, 6-[(1Z)-1-(4-chlorophenyl)-3-(dimethylamino)-1-propen-1-yl]-3-ethyl- (CA INDEX NAME)

Double bond geometry as shown.

RN 854534-26-2 HCAPLUS

CN 2(1H)-Quinolinone, 6-[(1Z)-1-(2,3-dihydro-1,4-benzodioxin-6-yl)-3-(dimethylamino)-1-propen-1-yl]-3-ethyl- (CA INDEX NAME)

Double bond geometry as shown.

RN 854534-27-3 HCAPLUS

CN 2(1H)-Quinolinone, 6-[(1E)-3-(dimethylamino)-1-phenyl-1-propen-1-yl]-3ethyl- (CA INDEX NAME)

Double bond geometry as shown.

RN 854534-28-4 HCAPLUS

CN 2(1H)-Quinolinone, 6-[(1Z)-3-(dimethylamino)-1-phenyl-1-propen-1-yl]-3-ethyl- (CA INDEX NAME)

Double bond geometry as shown.

RN 854535-35-6 HCAPLUS

CN 2(1H)-Quinolinone, 3-ethyl-6-[1H-1,2,4-triazol-1-yl[3-(trifluoromethyl)phenyl]methyl]- (CA INDEX NAME)

IT 854534-38-6P 854534-48-8P 854534-49-9P 854534-50-2P 854534-51-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)
(preparation of 6-alkenyl and 6-phenylalkyl substituted 2-quinolinones and

2-quinoxalinones as poly(ADP-ribose) polymerase inhibitors)

RN 854534-38-6 HCAPLUS

CN Formamide, N-[(1,2-dihydro-3-methyl-2-oxo-6-quinolinyl)phenylmethyl]-N-methyl- (CA INDEX NAME)

RN 854534-48-8 HCAPLUS

CN 2(1H)-Quinolinone, 6-(aminophenylmethyl)-3-methyl- (CA INDEX NAME)

RN 854534-49-9 HCAPLUS

N 2(1H)-Quinolinone, 6-(aminophenylmethyl)-3-methyl-, hydrochloride (1:1) (CA INDEX NAME)

● HCl

RN 854534-50-2 HCAPLUS

CN 2(1H)-Quinolinone, 6-(isocyanatophenylmethyl)-3-methyl- (CA INDEX NAME)

RN 854534-51-3 HCAPLUS

CN 2(1H)-Quinolinone, 6-(2-amino-1-phenylethyl)-3-methyl- (CA INDEX NAME)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L13 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2004:258080 HCAPLUS Full-text DOCUMENT NUMBER: 141:314292

TITLE: Thermal rearrangement of 3-phenacylquinoxalones-2

AUTHOR(S): Kolos, N. N.; Berezkina, T. V.; Orlov, V. D.

Khar'kov. Nats. Univ. im. V. N. Karazina, Kharkov, CORPORATE SOURCE:

61077. Ukraine

Zhurnal Organichnoi ta Farmatsevtichnoi Khimii SOURCE:

(2003), 1(1-2), 31-34

CODEN: ZOFKAM

PUBLISHER: Natsional'nii Farmatsevtichnii Universitet

DOCUMENT TYPE: Journal LANGUAGE: Russian

OTHER SOURCE(S): CASREACT 141:314292 GT

AB 2-Carboxymethylidene-3-aryl-1,2-dihydroguinoxalines I (R1 = Ph, 4-MeC6H4, 2thienv1, R2 = H, 7-C1; R1 = Ph, R2 = 6,7-Me2, 6-CN, 7-C1) and unsubstituted quinoxalin-2-one were prepared by thermal rearrangement of 3acylmethyldihydroguinoxalin-2-ones II in acetic acid or on heating above the m.p.; the direction of the reactions depends on the nature of the substituent in the quinoxaline aromatic ring. The thermodn. characteristics of decomposition of II (R1 = Ph, R2 = H) were calculated and computer anal. of potential pharmacol. activity of some products was carried out.

ΙT 448959-30-6

RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of (carboxymethylidene)dihydroquinoxalines by thermal rearrangement of (acylmethyl)dihydroquinoxalinones)

448959-30-6 HCAPLUS RN

CN 6-Quinoxalinecarbonitrile, 1,2,3,4-tetrahydro-2-oxo-3-(2-oxo-2phenylethyl) - (CA INDEX NAME)

L13 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 1990:612014 HCAPLUS Full-text

DOCUMENT NUMBER: 113:212014

ORIGINAL REFERENCE NO.: 113:35835a,35838a

Preparation of (1H-azol-1-ylmethyl)quinolines, TITLE: -quinazolines, and -quinoxalines as drugs

INVENTOR(S): Freyne, Eddy Jean Edgard; Venet, Marc Gaston;

Raeymaekers, Alfons Herman Margaretha; Sanz, Gerard

Charles

PATENT ASSIGNEE(S): Janssen Pharmaceutica N. V., Belg.

Eur. Pat. Appl., 106 pp. SOURCE:

CODEN: EPXXDW Patent

DOCUMENT TYPE: LANGUAGE:

PATENT INFORMATION:

English FAMILY ACC. NUM. COUNT: 1

PATENT NO.	KIND	DATE	API	PLICATION NO		DATE	
EP 371564	A2	19900606	EP	1989-203014		19891128	
EP 371564	A3	19910529					
EP 371564	B1	19950712					
R: AT, BE, CH	, DE, ES	, FR, GB,	GR, I	r. LI. LU. N	L, SE		
US 5028606	A	19910702		1989-434957		19891113	<
US 5037829	A	19910806	US	1989-435120		19891113	<
CA 2002864	A1	19900529	CA	1989-200286	4	19891114	<
CA 2002864	С	19991116					
DK 8905994	A	19900530	DK	1989-5994		19891128	<
DK 172748	B1	19990628					
NO 8904734	A	19900530	NO	1989-4734		19891128	<
NO 174509	В	19940207					
NO 174509	С	19940518					
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AU 620946	B2	19920227					
HU 52498	A2	19900728	HU	1989-6220		19891128	<
HU 205106	В	19920330					
ZA 8909076	A	19910731	ZA	1989-9076		19891128	<
SU 1780536	A3	19921207		1989-474254	3	19891128	
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ES 2088889	Т3	19961001		1989-203014		19891128	
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CN 1042912	A	19900613	CN	1989-108925		19891129	<
CN 1033752	C	19970108					
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JP 2916181	B2	19990705					
US 5151421	A	19920929	US	1991-672298		19910320	<
US 5185346	A	19930209		1991-704746		19910523	
US 5268380	A	19931207		1992-973871		19921110	
US 5441954	A	19950815		1993-131817		19931005	
CN 1106004	A	19950802		1994-117801		19941102	
CN 1036002	c	19971001					
CN 1106005	A	19950802	CN	1994-117802		19941102	<
CN 1036003	Ċ	19971001	011	1001 11.000		10011100	
US 5612354	A	19970318	IIS	1995-409551		19950323	<
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			110	1992-973871	y 3	19921110	
				1993-131817		19931005	
CONTRACT UTOMORIL MOR							

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OTHER SOURCE(S): MARPAT 113:212014

For diagram(s), see printed CA Issue.

The title compds. [I; R = H, alkyl; X1:X2 = CH:CH, CH:N, N:CH; Y = H, alkyl, cycloalkyl, alkenyl, alkynyl, (un)substituted aryl, aralkyl; Z = (un)substituted (oxo) quinolinyl, (oxo- or thioxo) quinazolinyl, (oxo- or dioxo) quinoxalinyl] were

prepared as retinoic acid metabolism inhibitors, aromatase inhibitors, etc. Thus, 3,4-dihydroquinolin-2(lH)-one was stirred 2 h at 70° with BzCl in DMF containing AlCl3 and the product reduced by NaBH4 to give hydroxymethylquinolinone II (Rl = Ph, R2 = OH). II (Rl = Me, R2 = OH) was stirred overnight with SOCl2 in THF and the product II (Rl = Me, R2 = Cl) stirred overnight at $60\text{--}70^\circ$ with lH-imidazole in DMSO to give II (Rl = Me, R2 = inidazolo) which maintained plasma levels of i.v. administered all-trans-retinoic acid at ≥ 10 ng/mL in rats 2 h after oral administration of 40 mg/kg. 130347-01-2P 130347-78-3F

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as retinoate metabolism and aromatase inhibitor)

RN 130347-01-2 HCAPLUS

TΤ

CN

2(1H)-Quinoxalinone, 3-methyl-6-[2-methyl-1-(1H-1,2,4-triazol-1-yl)propyl](CA INDEX NAME)

RN 130347-78-3 HCAPLUS

CN 2(1H)-Quinoxalinone, 3-ethyl-6-[2-methyl-1-(1H-1,2,4-triazol-1-yl)propyl](CA INDEX NAME)

OS.CITING REF COUNT: 24 THERE ARE 24 CAPLUS RECORDS THAT CITE THIS RECORD (43 CITINGS)

=> => d stat que 120 L1 STR

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US 10/596086
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STEREO ATTRIBUTES: NONE
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L20 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER:
                       2005:36553 HCAPLUS Full-text
DOCUMENT NUMBER:
                       142:134479
TITLE:
                       Preparation of tetrahydroquinoline derivatives as
                       cannabinoid receptor modulators
INVENTOR(S):
                       Sher, Philip M.; Sun, Chongqing; Sulsky, Richard B.;
                       Wu, Gang; Ewing, William R.
PATENT ASSIGNEE(S):
                       Bristol-Myers Squibb Company, USA
SOURCE:
                       U.S. Pat. Appl. Publ., 31 pp.
                       CODEN: USXXCO
DOCUMENT TYPE:
                       Patent
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PATENT NO. KIND DATE APPLICATION NO. DATE

English

LANGUAGE:

FAMILY ACC. NUM. COUNT: 1 PATENT INFORMATION:

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US 20050009870
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                                           US 2003-486774P
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                                           US 2004-889274
                                                             A1 20040712
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OTHER SOURCE(S):
                        MARPAT 142:134479
GI
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R1 R7 R7?

ÅR5

AB The invention provides for compds. I [R1, R3, R4 = H, alkyl, halo, CN; R2 = alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, heterocyclyl, heterocyclylalkyl, heteroaryl, aralkyl, heteroaralkyl, acyl, OR11, OCHF2; R5 = alkyl alkenyl, alkynyl, cycloalkyl, heterocyclyl, aryl, heteroaryl, CO2R13, CONR13R13a; R7, R7a

= H, alkly, cycloalkyl; R9 = H, alkyl alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, heterocyclyl, aralkyl, heteroaralkyl; R10 = alkyl alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, heterocyclyl, heterocyclylalkyl, aralkyl, heteroaralkyl; R11 = aryl, heteroaryl, heteroaralkyl; R12, R12a = H, alkyl alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, heterocyclyl, heterocyclylalkyl, aryl, heteroaryl, aralkyl, heteroaralkyl; R12R12a = cycloalkyl, heterocyclyl; R13, R13a =; R13R13a = H, alkyl alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, heterocyclyl, heterocyclylalkyl, aryl, heteroaryl, aralkyl, heteroaralkyl; X = (CR14R14a)n; R14, R14a = H, alkyl; R15 = H, alkyl alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, heterocyclyl, heterocyclylalkyl, aryl, heteroaryl, aralkyl, heteroaralkv1; R10R15 = cycloalkv1, heterocyclv1; n = 0 - 2; with the provisos: R5 ≠ (un)substituted imidazole; when Y = SO2, then R10 ≠ 7-membered lactam; when Y = SO2NR15, then R10, R15 \neq 7-membered lactaml. Thus, N-(1-Benzyl-2-oxo-1,2,3,4-tetrahydroquinolin-3- yl)benzenesulfonamide [I; R1 - R4 = R7 = R7a = R9 = H, R5 = R10 = Ph, X = CH2, Y = SO2] was prepared from 3-amino-1,2,3,4tetrahydroguinolin-2-one via N-protection with Boc2O, N-alkylation with PhCH2Br in DMF containing Cs2CO3, deprotection with CF3CO2H in CH2Cl2, and sulfonylation with PhSO2Cl in MeCN conta. EtN(CHMe2)2. Further provided are methods of using such compds. for the treatment of eating disorders, metabolic disorders, obesity, cognitive disorders, neurol. disorders, pain disorders, inflammation disorders, in the promotion of smoking cessation and for the treatment of other psychiatric disorders. The cannabinoid receptor binding activity of I were tested [Ki = 0.01 - 4000 nM]. Also provided are pharmaceutical compns. containing such compds. and pharmaceutical combinations of the compds. of the invention with other therapeutic agents.

IT 824412-60-4P, (S)-N-(1-Benzyl-6-cyano-2-oxo-1,2,3,4-

tetrahydroquinolin-3-yl)benzenesulfonamide 824412-61-59, (S)-N-(1-Benzyl-6-cyano-2-oxo-1,2,3,4-tetrahydroquinolin-3-yl)-3,5-

difluorobenzenesulfonamide
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of tetrahydroquinoline derivs. as cannabinoid receptor modulators)

RN 824412-60-4 HCAPLUS

CN Benzenesulfonamide, N-[(3S)-6-cyano-1,2,3,4-tetrahydro-2-oxo-1-(phenylmethyl)-3-quinolinyl]- (CA INDEX NAME)

Absolute stereochemistry.

RN 824412-61-5 HCAPLUS

CN Benzenesulfonamide, N-[(3S)-6-cyano-1,2,3,4-tetrahydro-2-oxo-1-(phenylmethyl)-3-quinolinyl]-3,5-difluoro- (CA INDEX NAME)

Absolute stereochemistry.

OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD

(8 CITINGS)

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2004:902165 HCAPLUS Full-text

DOCUMENT NUMBER: 141:360708

TITLE: Methods and materials for the treatment of pain

comprising opioid antagonists
INVENTOR(S): Burns, Lindsay H.; Schoenhard, Grant L.

PATENT ASSIGNEE(S): Pain Therapeutics, Inc., USA

SOURCE: PCT Int. Appl., 79 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PRI

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WO	2004	0915	93		A2		2004	1028	WO 2004-US11569						20040414 <				
WO	2004	0915	93		A3		2005	0421											
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		CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,		
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										WO 21	004-1	JS11:	569	1	W 21	0040	414		

AB Methods and compns. for treating subjects with pain, including neuropathic pain, using opioid antagonists are described. Such antagonists are used alone or in combinations with opioid agonists, wherein an opioid antagonist enhances the neuropathic pain-alleviating potency of an opioid agonist. For example, the

combination of naltrexone (0.1 ng) and morphine (10 μ g), representing a ratio of 1:100,000 of the opioid antagonist to opioid agonist, twice daily, resulted in a significant antihyperalgesic effect in a rat model of neuropathic pain, compared to vehicle or morphine alone for the Day 1 through Day 7 duration. Although morphine alone at 10 μ g resulted in 65% and 73% antihyperalgesia on Day 1 and 2, resp., with return to baseline by day 5, the combination of morphine (10 μ g) and naltrexone (0.1 ng) resulted in 75, 81, 91, 63, 79, 67 and 56% antihyperalgesia on Days 1 through 7, resp., as well as analgesia (paw withdrawal latencies went above baseline) Days 1 through 7.

IT 115066-14-3, CNQX

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(opioid antagonists alone or in combinations with opioid agonists and other agents for treatment of pain)

RN 115066-14-3 HCAPLUS

CN 6-Quinoxalinecarbonitrile, 1,2,3,4-tetrahydro-7-nitro-2,3-dioxo- (CA INDEX NAME)

OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD

(8 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2004:601225 HCAPLUS Full-text

DOCUMENT NUMBER: 142:49031

TITLE: Differential effects of NMDA and AMPA/kainate receptor

antagonists on superoxide production and MnSOD activity in rat brain following intrahippocampal

injection

AUTHOR(S): Radenovic, L.; Selakovic, V.; Kartelija, G.;

Todorovic, N.; Nedeljkovic, M.

CORPORATE SOURCE: Department of Physiology and Biochemistry, Faculty of Biology, University of Belgrade, Belgrade, 11000,

SOURCE: Brain Research Bulletin (2004), 64(1), 85-93

CODEN: BRBUDU; ISSN: 0361-9230

CODEN: BRBODO; 155N:

PUBLISHER: Elsevier Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

B The involvement of NMDA and AMPA/kainate receptors in the induction of superoxide radical production in the rat brain was examined after injection of kainate, non-NMDA receptor agonist, kainate plus 6-cyano-7-nitroquinoxaline-2,3-dione (CNOX), selective AMPA/kainate receptor antagonist, or kainate plus 2-amino-5-phosphonopentanoic acid (APV), selective NMDA receptor antagonist. Competitive glutamate receptor antagonists were injected with kainate unilaterally into the CA3 region of the rat hippocampus. We investigated superoxide production and mitochondrial MnSOD activity after injection. The measurements took place at different times (5, 15 min, 2, 48 h and 7 days) in the ipsi- and contralateral hippocampus, forebrain cortex, striatum, and cerebellum homogenates. Used

qlutamate antagonists APV and CNQX both expressed sufficient neuroprotection in sense of decreasing superoxide production and increasing MnSOD levels, but with differential effect in mechanisms and time dynamics. Our findings suggest that NMDA and AMPA/kainate receptors are differentially involved in superoxide production Following intrahippocampal antagonists injection they, also, interpose different neuroprotection effect on the induction of MnSOD activity in distinct brain regions affected by the injury, which are functionally connected via afferents and efferents. It suggests that MnSOD protects the cells in these regions from superoxide-induced damage and therefore may limit the retrograde and anterograde spread of neurotoxicity.

115066-14-3, 6-Cyano-7-nitroguinoxaline-2,3-dione

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

(intra hippocampal injection of kainate plus selective AMPA/kainate receptor antagonist 6-cyano-7-nitroquinoxaline-2,3-dione had neuroprotective effect by decreasing superoxide, increasing Mn-superoxide dismutase activity in rat brain)

115066-14-3 HCAPLUS RN

CN 6-Quinoxalinecarbonitrile, 1,2,3,4-tetrahydro-7-nitro-2,3-dioxo- (CA INDEX NAME)

OS.CITING REF COUNT: THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT L20 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2003:6165 HCAPLUS Full-text DOCUMENT NUMBER: 138:83349

TITLE: Cancer cell cell-surface molecule and cancer-specific promoter identification, targeting complexes, binding

partners, and treatment methods

INVENTOR(S): Poulsen, Hans Skovgaard; Pedersen, Nina; Mortensen, Shila; Sorensen, Susanne Berg; Petersen, Mikkel

Wandahl; Elsner, Henrik Irgang

Odin Medical A/S, Den. PATENT ASSIGNEE(S):

SOURCE: PCT Int. Appl., 223 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE WO 2003000928 A2 20030103 WO 2002-IB3534 20020619 <--WO 2003000928 A3 20040603 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,

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                         A 20041117
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                        T 20050113 JP 2003-507309
A 20050124 ZA 2004-535
A 20051209 IN 2004-CN145
A1 20050217 US 2004-482029
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PRIORITY APPLN. INFO.:
                                           DK 2001-992
                                                              A 20010625 <--
                                            US 2001-301818P
                                                              P 20010702 <--
                                            WO 2002-IB3534 W 20020619 <--
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The invention describes methods for identification of mole. expressed at a different level on the cell surface of cancer cells compared to non-malignant cells and methods of identification of cancer-specific promoters to be used singly or in combination for delivery and expression of therapeutic genes for treatment of cancer. The invention furthermore describes targeting complexes targeted to cell surface mole. identified by the methods of the invention. In embodiments of the invention, the targeting complexes comprise the promoters identified by the methods of the invention. In addition the invention describes methods of identifying binding partners for the cell surface mole, and the binding partners per se. Methods of treatment using the targeting complexes and uses of the targeting complexes for the preparation of a medicament are also disclosed by the invention. Furthermore, the invention describes uses of the cell surface mole. or fragments thereof for preparation of vaccines.

IT 115066-14-3, CNQX

RL: BSU (Biological study, unclassified); BIOL (Biological study) (binding partner; cancer cell cell-surface mol. and cancer-specific promoter identification, targeting complexes, binding partners, and treatment methods)

RN 115066-14-3 HCAPLUS

CN 6-Quinoxalinecarbonitrile, 1,2,3,4-tetrahydro-7-nitro-2,3-dioxo- (CA INDEX NAME)

OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2001:762988 HCAPLUS $\underline{\text{Full-text}}$

DOCUMENT NUMBER: 135:331346

TITLE: Synthesis of benzoamide piperidine containing

compounds as substance P antagonists

INVENTOR(S): Arnold, Eric Platt; Chappie, Thomas Allen; Huang,

Jianhua; Humphrey, John Michael; Nagel, Arthur Adam; O'Neill, Brian Thomas; Sobolov-Jaynes, Susan Beth;

Vincent, Lawrence Albert

PATENT ASSIGNEE(S): Pfizer Products Inc., USA SOURCE: PCT Int. Appl., 209 pp.

SOURCE: PCT Int. Appl., 20
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English FAMILY ACC. NUM. COUNT: 1

PATENT	INFORMATION:
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PATENT NO.					KIND DATE			APPLICATION NO.						D	DATE		
	2001077							WO 2001-IB629						20010406 <			<
WO	2001077	100		A3		2002	0307										
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ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 135:331346

GI

WO 2001-IB629 W 20010406 <--

AB Title compds. I [O = C:NH, C:CH2, C:S, C:O, SO, SO2; A = CH, CH2, C(alkv1), CH(alkyl), C(CF3), or CH(CF3) with the proviso that when B is present, A = CH, C(alkyl), or C(CF3); B = absent, CH2, or ethylene; Y, Z = N, CH, provided that both are not N; G = NH(CH2)q, S(CH2)q, O(CH2)q; q = 0-1 with the proviso that when $\alpha = 0$, G = NH2, SH, OH; W = 1-3 carbon linking group, including spiro assemblies; p = 0-2; R3 = H, acyl, carboxy, Ph, heterocyclyl, alkyl, etc.; R1, R2, R11-13 = H, alkyl, etc., or R12-13 together with the carbon atoms to which they are attached form a 5- or 6-membered heterocyclic ring, etc.; R4 = Ph, pyridyl, thienyl, etc.; R5-8 = H, alkyl, S(0)1-2-alkyl, S(0)1-2-aryl, alkoxy, halo, Ph, etc.] were prepared Approx. 100 synthetic examples and over 100 precursor prepns. were provided. For instance, 4-aminophenol was acylated with 3-chloropropionvl chloride (CH2C12, H2O, NaHCO3, room temperature, 4 h) and the product treated with AlCl3 at 210°C for 10 min effecting cyclization to the hydroxy quinolone intermediate. The intermediate was O-methylated (acetone, Me2SO4, K2CO3, room temperature, 16 h) and formylated in the 7 position (CH2C12, AlCl3, Cl2CHOMe) to give 7-formyl-6-methoxy-1H-1,2,3,4-tetrahydroquinolin- 2-one. Reductive alkylation of the quinolone with (2S,3S)-3-amino-2-phenylpiperidine (a. PhMe, 3Å mol. sieves; b. dichloroethane, NaHB(OAc)3, room temperature, 16 h) yielded II. Compds. I are NK-1 receptor antagonists, i.e., substance P receptor antagonists. At least one stereoisomer of the example compds, had a binding affinity, as measured by Ki, of at least 600 nM. I are used in the treatment and prevention of a wide variety of central nervous system disorders, inflammatory disorders, cardiovascular disorders, ophthalmic disorders, etc.

368832-06-8P 368834-80-4P 368834-82-6P RI: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BJOL (Biological study); PREP (Preparation); USES (Uses)

(drug candidate; synthesis of benzoamide piperidine containing compds. as substance P antagonists)

RN 368832-06-8 HCAPLUS

IT

CN 2(1H)-Quinolinone, 3,4-dihydro-1-methyl-7-(1-methylethoxy)-6-[[[(2R,3R)-2-phenyl-3-piperidinyl]amino]methyl]-, rel- (CA INDEX NAME)

Relative stereochemistry.

RN 368834-80-4 HCAPLUS

CN 2(1H)-Quinolinone, 3,4-dihydro-1-methyl-7-(1-methylethoxy)-6-[[[(2S,3S)-2-phenyl-3-piperidinyl]amino]methyl]-, hydrochloride (1:2) (CA INDEX NAME)

Absolute stereochemistry.

●2 HC1

RN 368834-82-6 HCAPLUS

CN 2(1H)-Quinolinone, 3,4-dihydro-1-methyl-7-(1-methylethoxy)-6-[[[(2S,3S)-2-phenyl-3-piperidinyl]amino]methyl]- (CA INDEX NAME)

Absolute stereochemistry.

TITLE:

OS.CITING REF COUNT: 12 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS

RECORD (14 CITINGS)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L20 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2010 ACS on STN ACCESSION NUMBER: 2001:260108 HCAPLUS Full-text DOCUMENT NUMBER: 136:144743

Caspase-Mediated Suppression of Glutamate (AMPA) Receptor Channel Activity in Hippocampal Neurons in Response to DNA Damage Promotes Apoptosis and Prevents Necrosis: Implications for Neurological Side Effects

of Cancer Therapy and Neurodegenerative Disorders
Lu, Chengbiao; Fu, Weiming; Mattson, Mark P.
CORPORATE SOURCE: Laboratory of Neurosciences, National Institute o

Laboratory of Neurosciences, National Institute on Aging, Baltimore, MD, 21224, USA

SOURCE: Neurobiology of Disease (2001), 8(2), 194-206 CODEN: NUDIEM: ISSN: 0969-9961

PUBLISHER: Academic Press
DOCUMENT TYPE: Journal
LANGUAGE: English

ΔB

RN

CN

English DNA damage in neurons is implicated in the pathogenesis of several neurodegenerative disorders and may also contribute to the often severe neurol. complications in cancer patients treated with chemotherapeutic agents. DNA damage can trigger apoptosis, a form of controlled cell death that involves activation of cysteine proteases called caspases. The excitatory neurotransmitter glutamate plays central roles in the activation of neurons and in processes such as learning and memory, but over activation of ionotropic glutamate receptors can induce either apoptosis or necrosis. Glutamate receptors of the AMPA (a-amino-3-hydroxy-5-methylisoxazole-4-propionate) type mediate such physiol. and pathol. processes in most neurons. We now report that DNA damage can alter glutamate receptor channel activity by a mechanism involving activation of caspases. Whole-cell patch clamp analyses revealed a marked decrease in AMPAinduced currents after exposure of neurons to camptothecin, a topoisomerase inhibitor that induces DNA damage; N-methyl-D-aspartate (NMDA)-induced currents were unaffected by camptothecin. The decrease in AMPA-induced current was accompanied by a decreased calcium response to AMPA. Pharmacol. inhibition of caspases abolished the effects of camptothecin on AMPA-induced current and calcium responses, and promoted excitotoxic necrosis. Combined treatment with glutamate receptor antagonists and a caspase inhibitor prevented camptothecininduced neuronal death. Caspase-mediated suppression of AMPA currents may allow neurons with damaged DNA to withdraw their participation in excitatory circuits and undergo apoptosis, thereby avoiding widespread necrosis. These findings have important implications for treatment of patients with cancer and

neurodegenerative disorders. (c) 2001 Academic Press. IT 115066-14-3, CNQX

RL: PAC (Pharmacological activity); BIOL (Biological study)

(combined treatment with glutamate receptor antagonists and a caspase inhibitor prevented camptothecin-induced neuronal death)

115066-14-3 HCAPLUS

6-Quinoxalinecarbonitrile, 1,2,3,4-tetrahydro-7-nitro-2,3-dioxo- (CA INDEX NAME)

OS.CITING REF COUNT: 16 THERE ARE 16 CAPLUS RECORDS THAT CITE THIS RECORD (16 CITINGS)

REFERENCE COUNT: 68 THERE ARE 68 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L20	6 SEA ABB=ON PLU=ON L19 NOT L12
	D STAT QUE L20

D IBIB ABS HITSTR L20 1-6

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